



Make your products crispier, tastier and more successful with Loryma!

Protect and optimise your meat, fish, cheese, vegetable, potato, or veggie products with Loryma breadings and coatings. We offer you system solutions that are customised to your specific tasks. Our coatings and breadings are tailor-made for the specific requirements of the substrate to be coated. Depending on the product substrate, the intended use and the manufacturing process, you can use the Loryma coating system to coat in one, two or more stages.

High-performance raw materials

Thanks to the exclusive use of EU wheat, we can guarantee that we only process non-GMO wheat. It is also particularly high in nutrients, in addition to having a high degree of purity.

Loryma coating systems ...

- provide excellent all-round adhesion.
- generate optimum crispness from crunchy to crispy.
- are freeze/thaw stable.
- have very good baking and fermentation cooking stability.
- offer perfect protection against increased heat.
- keep the juiciness in the substrate.
- optimise the flavour.
- give an appetising appearance.
- provide an excellent mouthfeel.
- available with visuals like herbs and spices.
- are based on special Loryma wheat starches, which increase crispness during the frying process.

The application fields of coatings and breadings

Pre-treatment, intermediate coating and external coating of:

- poultry,
- pork,
- fish,
- seafood,
- potato products,

- vegetables,
- vegetarian product alternatives,
- vegan product alternatives,
- cheese products.







Single-stage coatings

With single-stage coatings, you can coat your product in just one process step, thereby refining its surface, improving its texture and enabling optimum adhesion of visuals and spices. This way, they protect the substrate from drying out and increase product quality. With the individual setting of the pick-up, you optimise your value chain and secure your manufacturing process with perfectly-coordinated ingredients.

Single-stage coating systems ...

- protect the substrate in the frying, deep-frying and cooling process.
- increase the crispiness.
- excellent adhesive properties to reconstituted products and whole cuts of meat.
- are freeze/thaw stable.
- allow fixation of spices and visuals.

Single-stage dry breadings

The Loryma single-stage dry breadings are dustings that are used mainly for substrates with a moist surface such as fish. They fixate the fragile product and protect it from drying out. A special combination of Loryma starches and flours, as well as spices ensures optimum surface sensory properties that bind moisture and give your end-consumer product the desired seasoning and texture.

Single-stage batters

Clear Coatings:

Transparent coatings that make the visuals and spices on the product surface visible.

Glazing:

Gel-like coating that protects the product from moisture loss and prevents iceing in free-packed frozen products (IQF).

One-stage batters:

Easy to use tempura (baking dough) with limited pick-ups.

Two-stage coatings

Two-stage coatings consist of a wet and a dry, texturing coating and are suitable for almost all whole cuts of meat, as well as substrates with a solid surface. Specially-developed Loryma batters with our perfectly-aligned Lory® Starch wheat starches ensure optimum all-round adhesion in accordance with the substrate's surface properties.

- Special solutions for smooth, rough, moist and dry surfaces
- Uniform layer thickness and individual adjustment of the pick-up
- Combination of varying dry breadings for a variety of effects
- Breader breading for a crispy crust
- Starch-based dusting to protect against drying out and to fixate moist and unstable substrates

Three-stage coatings

In the three-stage coating process, Loryma offers both breading and composition of the batter. Compared to the classic two-stage breading process, the process has the advantage that optimum adhesion is also ensured with higher pick-ups. The system is also particularly suitable for substrates with a moist, smooth surface such as fish, and seafood and chicken with skin.

Three-stage breading

- Pre-flouring by dusting for optimum adhesion of the following layers
- Intermediate coating with batter for adjustment of the pick-ups and breading fixation
- Final coating with dry topcoat for sensory characterisation of the breading

Three-stage baking batter build-up

- Coating with milkwash, a low-viscosity batter
- Coating with an intermediate, an absorbent dry component layer for optimum all-round adhesion, even at the edges of the substrate
- Final baking dough application for a firm, stable and fluffy to crispy coating and an appetizing, golden-brown appearance

Four-stage and multi-stage coatings

Four-stage and multi-stage processes are used especially for substrates with high water content and/or thermal instability, where the breading has to counteract high vapour pressures. They are also used for particularly smooth and dry substrate surfaces, since the milkwash ensures improved adhesion for the actual breading application.

Four-stage coating process

- · Coating with milkwash, a low-viscosity batter
- Pre-flouring by dusting for optimum adhesion of the following layers*
- Intermediate coating with batter for adjustment of the pick-ups and breading fixation
- Final coating with dry topcoat for sensory characterisation of the breading

^{*}The intermediate steps can be repeated at will, depending on the substrate requirement, since the more layers applied, the more resistant the breading is to thermally-induced pressure differences.

Our breading and coating systems:			Pretreatment			Interlayer		Outside breading			
			Clear Coating Thin coating	Milkwash Thin batter	Predust Predusting with flour	Batter batter	Intermediate Intermediate flour dusting	Tempura Baking batter	Dusting Outside flouring	Breader Outside breading	Crumb Breadcrumbs
	Application	Substrate texture									
	Trout meunière, fried herring	very moist, smooth							1. 2.	2.	
Fish	Breaded pollack, fish fingers	very moist, smooth				1.				2.	2.
	Fried fish, Kibbeling	very moist, smooth		1.			2.	3.			
	Fish cake	moist, coarse			1.	1. 2.				2. 3.	2. 3.
Seafood	Breaded scampi	moist, very smooth		1.	1.	2. 3.			2.	4.	3. 4.
	Breaded calamari	very moist, smooth		1.			2.	3.			
Poultry	Breaded fillet, sliced	moist, coarse			1.	1. 2.				2. 3.	2.
	Breaded poultry with skin, fried chicken	moist, very smooth			1.	1. 2.				2.	2. 3.
	Drumsticks, wings, grown pieces	dry, smooth	1.	1.	1.	1. 2.	2.	3.		2.	2. 3.
	Nuggets, restructured meat	moist, coarse		1.		1.	2.	3.			2.
	Protection against iceing	moist, smooth									
1-stage 2-stage 3-stage 4-stage Multi-stage		Depending on the application, different stages are used in the process. The colours provide an overview of the different levels and the numbers in each level.									

Our breading and coating systems:			Pretreatment			Interlayer		Outside breading				
			Clear Coating Thin coating	Milkwash Thin batter	Predust Predusting with flour	Batter batter	Intermediate Intermediate flour dusting	Tempura Baking batter	Dusting Outside flouring	Breader Outside breading	Crumb Breadcrumbs	
	Application	Substrate texture										
Pork	Breaded fillet	moist, coarse				1.				2.	2.	
	Breaded sausage in slices	dry, smooth				1. 3.	2.			4.	4.	
	Corn dogs, sausage in baking batter	dry, smooth						1.				
	Protection against iceing	moist, smooth	1.									
Potato products	French fries	dry, smooth	1.									
	Potato wedges, wedges	dry, smooth	1.									
	Swiss hash browns	dry, smooth	1.									
	Potato croquettes	moist, coarse				1.			2.	2.	2.	
Vegeta- bles	Onion rings, mushrooms, cauliflower	dry, smooth–coarse					2.	3.				
Cheese ana- products logues	Vegetarian/vegan nuggets, pre-cooked	dry, coarse		1.		1.	2.	3.			2.	
	Vegetarian/vegan schnitzel, pre-cooked	dry, coarse				1.				2.	2.	
	Mozzarella sticks, cheese nuggets	dry, smooth		1.		3.	2.			4.	4.	
	Breaded Camembert	very dry, smooth		1. 1.		3. 3. 5.	 2. 4. 		4. 6.	4. 6.	4. 6.	
1-stage 2-stage 3-stage 4-stage Multi-stage				Depending on the application, different stages are used in the process. The colours provide an overview of the different levels and the numbers in each level.								





Loryma GmbH Am Falltor 3, 64673 Zwingenberg, Germany T +49 6251 1799-0, F +49 6251 73964 info@loryma.de www.loryma.de